



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	. FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/868,667	09/04/2001	Eric Jeffrey Lannert	05222.00179	2990	
29638	7590 04/13/2005		EXAM	INER	
	BANNER & WITCOFF AND ATTORNEYS FOR ACCENTURE 10 S. WACKER DRIVE, 30TH FLOOR			STARKS, WILBERT L	
CHICAGO,			ART UNIT	PAPER NUMBER	
•			2129		

DATE MAILED: 04/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b></b>	09/868,667	LANNERT ET AL.
Office Action Summary	Examiner	Art Unit
	Wilbert L. Starks, Jr.	2129
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet w	ith the correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period or - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	I36(a). In no event, however, may a lifty within the statutory minimum of thir will apply and will expire SIX (6) MONe, cause the application to become Al	reply be timely filed  ty (30) days will be considered timely.  ITHS from the mailing date of this communication  BANDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 16 F	ebruary 2005	
•	s action is non-final.	
3) Since this application is in condition for allowa		ers, prosecution as to the merits is
closed in accordance with the practice under E	· ·	
Disposition of Claims		
4)⊠ Claim(s) <u>1-18</u> is/are pending in the application	•	
4a) Of the above claim(s) is/are withdra		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-18</u> is/are rejected.		
7) Claim(s) is/are objected to.		•
8) Claim(s) are subject to restriction and/o	or election requirement.	
Application Papers	•	
9) The specification is objected to by the Examine	ar.	
10) The drawing(s) filed on is/are: a) acc		by the Evaminer
Applicant may not request that any objection to the		•
Replacement drawing sheet(s) including the correct	<del>-</del> , ,	* *
11) The oath or declaration is objected to by the Ex	·	
,		
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. §	§ 119(a)-(d) or (t).
a) ☐ All b) ☐ Some * c) ☐ None of:	la hava hasa sasat sad	
1. Certified copies of the priority document		polication No
2. Certified copies of the priority document		
3. Copies of the certified copies of the prio	•	received in this national Stage
application from the International Burea  * See the attached detailed Office action for a list		received
See the attached detailed Office action for a list	or the certified copies flot	received.
Attachment(s)		Summary (PTO-413)
Notice of References Cited (PTO-892)   Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(	s)/Mail Date
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) Notice of I	nformal Patent Application (PTO-152)
Paper No(s)/Mail Date		

Art Unit: 2129

# **DETAILED ACTION**

1. In reviewing this case for appeal, Examiner discovered art that is applicable to reject the case under 102(e). since this is a new ground of rejection, this action is made **NONFINAL**.

# Claim Rejections - 35 U.S.C. §101

2. 35 U.S.C. §101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the invention as disclosed in claims 1-18 is directed to non-statutory subject matter.

- 3. Claims 1-18 are not claimed to be practiced on a computer, therefore, it is clear that the claims are not limited to practice in the technological arts. On that basis alone, they are clearly nonstatutory.
- 4. Regardless of whether any of the claims are in the technological arts, none of them is limited to practical applications in the technological arts. Examiner finds that *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) controls the 35 U.S.C. §101 issues on that point for reasons made clear by the Federal Circuit in *AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447 (Fed. Cir. 1999). Specifically, the Federal Circuit held that the act of:

...[T]aking several abstract ideas and manipulating them together adds nothing to the basic equation. *AT&T v. Excel* at 1453 quoting *In re Warmerdam*, 33 F.3d 1354, 1360 (Fed. Cir. 1994).

Examiner finds that Applicant's "information indicative of a goal" references are just such abstract ideas.

5. Examiner bases his position upon guidance provided by the Federal Circuit in *In re Warmerdam*, as interpreted by *AT&T v. Excel*. This set of precedents is within the same line of cases as the *Alappat-State Street Bank* decisions and is in complete agreement with those decisions. *Warmerdam* is consistent with *State Street*'s holding that:

Today we hold that the transformation of data, representing <u>discrete dollar amounts</u>, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation because it produces 'a useful, concrete and tangible result" -- a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades. (emphasis added) State Street Bank at 1601.

Art Unit: 2129

6. True enough, that case later eliminated the "business method exception" in order to show that business methods were not per se nonstatutory, but the court clearly *did not* go so far as to make business methods *per se statutory*. A plain reading of the excerpt above shows that the Court was *very specific* in its definition of the new *practical application*. It would have been much easier for the court to say that "business methods were per se statutory" than it was to define the practical application in the case as "...the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price..."

- 7. The court was being very specific.
- 8. Additionally, the court was also careful to specify that the "useful, concrete and tangible result" it found was "a final share price momentarily fixed for recording purposes and even accepted and <u>relied upon</u> by regulatory authorities and in subsequent <u>trades</u>." (i.e. the trading activity is the <u>further practical use</u> of the real world <u>monetary</u> data beyond the transformation in the computer i.e., "post-processing activity".)
- 9. Applicant cites no such specific results to define a useful, concrete and tangible result. Neither does Applicant specify the associated practical application with the kind of specificity the Federal Circuit used.

Art Unit: 2129

10. Furthermore, in the case *In re Warmerdam*, the Federal Circuit held that:

...[T]he dispositive issue for assessing compliance with Section 101 in this case is whether the claim is for a process that goes beyond simply manipulating 'abstract ideas' or 'natural phenomena' ... As the Supreme Court has made clear, '[a]n idea of itself is not patentable, ... taking several abstract ideas and manipulating them together adds nothing to the basic equation. In re Warmerdam 31 USPQ2d at 1759 (emphasis added).

Page 6

Art Unit: 2129

11. Since the Federal Circuit held in *Warmerdam* that this is the "dispositive issue" when it judged the usefulness, concreteness, and tangibility of the claim limitations in that case, Examiner in the present case views this holding as the dispositive issue for determining whether a claim is "useful, concrete, and tangible" in similar cases. Accordingly, the Examiner finds that Applicant manipulated a set of abstract "information indicative of a goal" to solve purely algorithmic problems in the abstract (i.e., what *kind* of "information" is used in the goal? Algebraic word problems? Boolean logic problems? Fuzzy logic algorithms? Probabilistic word problems? Philosophical ideas? Even vague expressions, about which even reasonable persons could differ as to their meaning? Combinations thereof?) Clearly, a claim for manipulation of "natural language input" is provably even more abstract (and thereby less limited in practical application) than pure "mathematical algorithms" which the Supreme Court has held are per se nonstatutory – in fact, it *includes* the expression of nonstatutory mathematical algorithms.

12. Since the claims are not limited to <u>exclude</u> such abstractions, the broadest reasonable interpretation of the claim limitations <u>includes</u> such abstractions. Therefore, the claims are impermissibly abstract under 35 U.S.C. 101 doctrine.

Art Unit: 2129

13. Since Warmerdam is within the Alappat-State Street Bank line of cases, it takes the same view of "useful, concrete, and tangible" the Federal Circuit applied in State Street Bank. Therefore, under State Street Bank, this could not be a "useful, concrete and tangible result". There is only manipulation of abstract ideas.

14. The Federal Circuit validated the use of *Warmerdam* in its more recent *AT&T*Corp. v. Excel Communications, Inc. decision. The Court reminded us that:

Finally, the decision in In re Warmerdam, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) is not to the contrary. \*\*\* The court found that the claimed process did nothing more than manipulate basic mathematical constructs and concluded that 'taking several abstract ideas and manipulating them together adds nothing to the basic equation'; hence, the court held that the claims were properly rejected under §101 ... Whether one agrees with the court's conclusion on the facts, the holding of the case is a straightforward application of the basic principle that mere laws of nature, natural phenomena, and abstract ideas are not within the categories of inventions or discoveries that may be patented under §101. (emphasis added) AT&T Corp. v. Excel Communications, Inc., 50 USPQ2d 1447, 1453 (Fed. Cir. 1999).

- 15. Remember that in *In re Warmerdam*, the Court said that this was the dispositive issue to be considered. In the *AT&T* decision cited above, the Court reaffirms that this is the issue for assessing the "useful, concrete, and tangible" nature of a set of claims under §101 doctrine. Accordingly, Examiner views the *Warmerdam* holding as the dispositive issue in this analogous case.
- 16. The fact that the invention is merely the manipulation of *abstract ideas* is clear.

  The data referred to by Applicant's phrase "information indicative of a goal" is simply an abstract construct that does not limit the claims to the transformation of real world data

Art Unit: 2129

(such as monetary data or heart rhythm data) by some disclosed process.

Consequently, the necessary conclusion under *AT&T*, *State Street* and *Warmerdam*, is straightforward and clear. The claims take several abstract ideas (i.e., "information indicative of a goal" in the abstract) and manipulate them together adding nothing to the basic equation. Claims 1-18 are, thereby, rejected under 35 U.S.C. §101.

17. Regarding the "system" recitals in claims 10 – 18, the invention is still found to be nonstatutory. Any other finding would be at variance with current case law. Specifically, the Federal Circuit held in *AT&T v. Excel*, 50 USPQ2d 1447 (Fed. Cir. 1999) that:

Whether stated implicitly or explicitly, we consider the scope of Section 101 to be the same regardless of the form — machine or process—in which a particular claim is drafted. AT&T v. Excel, 50 USPQ2d 1447, 1452 citing In re Alappat, 33 F.3d at 1581, 31 USPQ2d at 1589 (Rader, J., concurring) (emphasis added.)

18. Examiner considers the scope of Section 101 to be the same regardless of whether Applicant *claims* a "process", "machine", or "product of manufacture". While the "system" recitals in the preambles of claims 10 - 18 make the claims ostensibly drawn to be "apparatus" claims, they are insufficient by themselves to <u>limit</u> the claims to statutory subject matter. Examiner's position is clearly consistent with *Alappat*, and *AT&T* and is implicitly consistent with *Warmerdam* and *State Street*. Accordingly, those claims are also properly rejected.

Art Unit: 2129

19. The following is a quotation of the first paragraph of 35 U.S.C. §112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

20. Claims 1-18 are rejected under 35 U.S.C. §112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a §101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed how to practice the *undisclosed* practical application. This is how the MPEP puts it:

("The how to use prong of section 112 incorporates as a matter of law the requirement of 35 U.S.C. 101 that the specification disclose as a matter of fact a practical utility for the invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. § 101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. § 112."); In re Kirk, 376 F.2d 936, 942, 153 USPQ 48, 53 (CCPA 1967) ("Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, otherwise an applicant would anomalously be required to teach how to use a useless invention."). See, MPEP 2107.01(IV), quoting In re Kirk (emphasis added).

Therefore, claims 1-18 are rejected on this basis.

## Claim Rejections - 35 U.S.C. § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

Page 10

Application/Control Number: 09/868,667

Art Unit: 2129

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

21. Claims 1, 2, 4-6, 8-11, 13-15, and 17 are rejected under 35 U.S.C. §102(e) as being anticipated by Goodkovsky<sup>1</sup>. Specifically,

## Claim 1

22. Claim 1's "(a) receiving goal-related information indicative of a goal, the goal-related information specifying one or more learning objectives of the presentation, the goal being associated with a **training objective**;" is anticipated by Goodkovsky, col. 41, lines 40-52, where it recites:

providing a Tutor Module comprising at least one learning paradigm and at least one authoring tool, each learning paradigm associating media data of the Domain Module with at least one **training objective** and at least one skill set, each authoring tool defining for the Tutor Module a course module comprising audience data, job/task data, cognitive data, and **training objectives**, the audience data and cognitive data quantifying an educational goal, the course module being based on at least one relational association of course module elements to establish situated performance patterns;

23. Claim 1's "(b) <u>querying a user</u> for user-related information based on said one or more learning objectives of the presentation;" is anticipated by Goodkovsky, col. 41, lines 53-54, where it recites:

providing the Domain Module data to the learner through an interface;

<sup>&</sup>lt;sup>1</sup> Goodkovsky (U.S. Patent Number 6,807,535 B2; dated 19 OCT 2004; class 706; subclass 003).

Art Unit: 2129

24. Claim 1's "(c) <u>analyzing the user-related information from user responses</u> to ascertain user characteristics;" is anticipated by Goodkovsky, col. 41, lines 55-59, where it recites:

monitoring actions of the learner interacting with the Domain Module;

determining a level of knowledge of the learner for at least one skill set based on the actions of the learner interacting with the Domain Module;

25. Claim 1's "(d) integrating instruction-related information that motivates accomplishment of the goal for use in the presentation based on the user characteristics; and" is anticipated by Goodkovsky, col. 42, lines 1-5, where it recites:

selecting a training method based on the predicted level of knowledge of the learner:

generating at least one course module comprising a sequence of selected training actions, based on the level of knowledge of the learner;

26. Claim 1's "(e) evaluating progress toward the goal and providing feedback based on the user characteristics that further motivates accomplishment of the goal." is anticipated by Goodkovsky, col. 42, lines 9-10, where it recites:

monitoring progress by the learner through the course module;

## Claim 2

27. Claim 2's "The method for creating a presentation as recited in claim 1, including the step of installing a particular **feedback model** based on the characteristics of the user." is anticipated by Goodkovsky, col. 42, lines 20-23, where it recites:

providing <u>directed training</u> of said course module <u>based on the predicted</u> <u>level of knowledge of the learner</u> for at least one additional skill set;

## Claim 4

28. Claim 4's "The method for creating a the presentation as recited in claim 1, including the step of <u>creating a **tailored presentation** based on the characteristics of the user." is anticipated by Goodkovsky, col. 42, lines 16-22, where it recites:</u>

predicting a level of knowledge of the learner for at least one additional skill set based on at least one of the identified behavioral patterns, an associate of the skills sets, and the actions of the learner;

providing <u>directed training</u> of said course module <u>based on the predicted</u> level of knowledge of the learner for at least one additional skill set;

## Claim 5

29. Claim 5's "The method for creating a the presentation as recited in claim 4, including the step of **storing** portions of the tailored presentation based on the characteristics of the user." is anticipated by Goodkovsky, col. 38, lines 5-8, where it recites:

a computer having an input for entry of information, a memory for storing information, a CPU for executing programs and an output for presentation of results of execution of a program; and

## Claim 6

30. Claim 6's "The method for creating the presentation as recited in claim 1, including the step of selecting examples based on the characteristics of the user." is anticipated by Goodkovsky, col. 42, lines 16-22, where it recites:

predicting a level of knowledge of the learner for at least one additional skill set based on at least one of the identified behavioral patterns, an associate of the skills sets, and the actions of the learner;

providing <u>directed training</u> of said course module <u>based on the predicted</u> level of knowledge of the learner for at least one additional skill set;

#### Claim 8

31. Claim 8's "The method for creating a the presentation as recited in claim 1, including the step of tailoring feedback based on a character profile based on the user responses." is anticipated by Goodkovsky, col. 42, lines 16-22, where it recites:

predicting a level of knowledge of the learner for at least one additional skill set based on at least one of the identified behavioral patterns, an associate of the skills sets, and the actions of the learner;

providing <u>directed training</u> of said course module <u>based on the predicted</u> <u>level of knowledge of the learner</u> for at least one additional skill set;

## Claim 9

32. Claim 9's "The method for creating a the presentation as recited in claim 1, including the step of presenting a tailored simulation based on characteristics of the user." is anticipated by Goodkovsky, col. 42, lines 16-22, where it recites:

predicting a level of knowledge of the learner for at least one additional skill set based on at least one of the identified behavioral patterns, an associate of the skills sets, and the actions of the learner;

providing <u>directed training of said course module based on the predicted</u> level of knowledge of the learner for at least one additional skill set;

## Claim 10

33. Claim 10's "(a) a processor;" is anticipated by Goodkovsky, col. 38, lines 5-8, where it recites:

a computer having an input for entry of information, a memory for storing information, a CPU for executing programs and an output for presentation of results of execution of a program; and

34. Claim 10's "(b) a memory that stores goal-related information under the control of the processor, the goal-related information specifying one or more learning objectives of the presentation, the goal being associated with a training objective" is anticipated by Goodkovsky, col. 41, lines 40-52, where it recites:

providing a Tutor Module comprising at least one learning paradigm and at least one authoring tool, each learning paradigm associating media data of the Domain Module with at least one **training objective** and at least one skill set, each authoring tool defining for the Tutor Module a course module comprising audience data, job/task data, cognitive data, and **training objectives**, the audience data and cognitive data quantifying an educational

Art Unit: 2129

goal, the course module being based on at least one relational association of course module elements to establish situated performance patterns;

35. Claim 10's "(c) logic that queries a user for user-related information based on said one or more learning objectives of the presentation;" is anticipated by Goodkovsky, col. 41, lines 53-54, where it recites:

providing the Domain Module data to the learner through an interface;

36. Claim 10's "(d) logic that analyzes the user-related information from user responses to ascertain user characteristics;" is anticipated by Goodkovsky, col. 41, lines 55-59, where it recites:

monitoring actions of the learner interacting with the Domain Module;

determining a level of knowledge of the learner for at least one skill set based on the actions of the learner interacting with the Domain Module;

37. Claim 10's "(e) logic that integrates progress toward the goal and providing feedback based on the user characteristics that further motivates accomplishment of the goal; and" is anticipated by Goodkovsky, col. 42, lines 1-5, where it recites:

selecting a training method based on the predicted level of knowledge of the learner:

generating at least one course module comprising a sequence of selected training actions, based on the level of knowledge of the learner;

Art Unit: 2129

38. Claim 10's "(f) logic that evaluates progress toward the goal and providing feedback based on the user characteristics that further motivates accomplishment of the goal.

monitoring progress by the learner through the course module;

#### Claim 11

39. Claim 11's "The apparatus that creates the presentation as recited in claim 10, including logic that instantiates a particular feedback model based on the characteristics of the user." is anticipated by Goodkovsky, col. 42, lines 20-23, where it recites:

providing <u>directed training</u> of said course module <u>based on the predicted</u> <u>level of knowledge of the learner</u> for at least one additional skill set;

#### Claim 13

40. Claim 13's "The apparatus that creates the presentation as recited in claim 10, including logic that creates a tailored presentation based on the characteristics of the user." is anticipated by Goodkovsky, col. 42, lines 16-22, where it recites:

predicting a level of knowledge of the learner for at least one additional skill set based on at least one of the identified behavioral patterns, an associate of the skills sets, and the actions of the learner;

providing <u>directed training</u> of said course module <u>based on the predicted</u> <u>level of knowledge of the learner</u> for at least one additional skill set;

#### Claim 14

41. Claim 14's "The apparatus that creates the presentation as recited in claim 10, including <u>logic that stores</u> portions of the tailored presentation based on the

Art Unit: 2129

characteristics of the user." is anticipated by Goodkovsky, col. 41, lines 40-52, where it recites:

providing a Tutor Module comprising at least one learning paradigm and at least one authoring tool, each learning paradigm associating media data of the Domain Module with at least one **training objective** and at least one skill set, each authoring tool defining for the Tutor Module a course module comprising audience data, job/task data, cognitive data, and **training objectives**, the audience data and cognitive data quantifying an educational goal, the course module being based on at least one relational association of course module elements to establish situated performance patterns;

This claim is further rejected under §112, first paragraph because Applicant has not disclosed how he actually realizes a "logic that stores" information. "Logic" is inherently memoryless and must itself be stored on a computer readable medium.

#### Claim 15

42. Claim 15's "The apparatus that creates the presentation as recited in claim 10, including logic that selects examples based on the characteristics of the user." is anticipated by Goodkovsky, col. 42, lines 16-22, where it recites:

predicting a level of knowledge of the learner for at least one additional skill set based on at least one of the identified behavioral patterns, an associate of the skills sets, and the actions of the learner;

providing <u>directed training</u> of said course module <u>based on the predicted</u> <u>level of knowledge of the learner</u> for at least one additional skill set;

#### Claim 17

43. Claim 17's "The apparatus that creates the presentation as recited in claim 10, including logic that tailors feedback based on a character profile based on the user responses." is anticipated by Goodkovsky, col. 42, lines 16-22, where it recites:

predicting a level of knowledge of the learner for at least one additional skill set based on at least one of the identified behavioral patterns, an associate of the skills sets, and the actions of the learner;

providing <u>directed training</u> of said course module <u>based on the predicted</u> <u>level of knowledge of the learner</u> for at least one additional skill set;

## Conclusion

- 44. Since new grounds of rejection were raised in this action, this action is made NONFINAL.
- 45. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Wilbert L. Starks, Jr. whose telephone number is (571) 272-3691.

Alternatively, inquiries may be directed to the following:

S. P. E. Anthony Knight (571) 272-3687

After-final (FAX) (703) 746-7238

Official (FAX) (703) 746-7239

Non-Official/Draft (FAX) (703) 746-7240

Wilbert L. Starks, Jr. Primary Examiner

Art Unit: 2129

WLS

11 April 2005

Wilbert L. Starks, Jr.
Wilbert L. Starks, Jr.
Primary Examiner